

I - COUNTY RANKING SUMMARY AND INDIVIDUAL COMMUNITY RANKING TABLES

The following tables are included as backup to the Top 10 Hazards and supporting Hazard Analysis Rankings tables shown in Section 2.2. These tables display the rankings for all of the hazards across all of the communities within Macomb County. Each hazard was assigned a score of between 1 and 10 with 1 as the worst (highest) score on the community surveys. During analysis, the scoring was reversed so that the scores could be aggregated across the communities. For example, if a hazard on the tables was ranked at #3, it was assigned a point value of 8. Similarly, a hazard ranked at #1 received 10 points while a hazard ranked at #10 received 1 point. Each table has an additional note at the bottom describing the method used to rank the hazards. The “Top Ten Survey Results” and the “Hazard Rating Analysis Results” tables are listed on the following pages.

This Appendix also includes the individual hazard ranking analysis tables for each community within Macomb County. These tables are the results of the rating given by the community officials that filled out the tables from the survey, multiplied by the percentage weight given to each aspect. These aspects were included to profile the severity of the hazard and percentage weights were determined based on how the communities ranked the aspects (most important aspects given larger weight). The values in the cells were summed to obtain the Overall Hazard Rating. These values were used to rank the hazards (highest number resulted in a rank of #1, second highest resulted in #2, and so on. The ranks were then assigned the point values for the Hazard Rating Analysis Results table as described in Appendix 6.5 and the body of the Hazard Mitigation Plan document. The data obtained from these tables was used to supplement and support the primary list of hazards, which was the “Top Ten Survey Results” table.

**TOP TEN SURVEY RESULTS -
CUMULATIVE COMMUNITY SCORES FOR EACH HAZARD**

HAZARD TYPE	COMMUNITY RANK																							SUM	RANK				
	Armada (Village)	Armada Township	Bruce Township	Center Line	Chesterfield Township	Clinton Township	Eastpointe	Fraser	Harrison Township	Lake *(Not Participating)*	Lenox Township	Macomb Township	Memphis	Mount Clemens	New Baltimore	New Haven	Ray Township	Richmond (City)	Richmond Township	Romeo	Roseville	St. Clair Shores	Shelby Township			Sterling Heights	Utica	Warren	Washington
Severe Winds	9				9	10	9				10		9	4	5		8		7		1		10	9	10	9	119	1	
Snowstorms	8				8	7	8	3				8	3	10			10		10		8			8	9	7	107	2	
Ice & Sleet Storms	4				9	8		4				8	2	9			4		8		7			8	8	8	87	3	
Tornadoes	3				5	10	9		1			8	9		7	6				9		1			9	5	82	4	
Transportation Hazmat	1				7	7	4	7	8			5		7			5				4		7	5	2		69	5	
Fixed Site Hazmat					8	6		3				6		8	2		9				5		8	5	3		63	6	
River Flooding	7				1							9	7		6		10				10			10	1		61	7	
Lightning	5								2						8			9			2		6	9	7	10	58	8	
Structural Fires	10				3	3	10	10									7			3	1			6	4		57	9	
Infrastructure Failures	6				6	2	6					3		6	3	8	3	6		6	6			3			64	10	
Energy Emergencies					10	5	2	5				4		10				7		4				3	1		51	11	
Hail	2				9										5			3						9	9	6	43	12	
Transportation Accidents					3				9			7		1		10	4								7		41	13	
Terrorism/Sabotage/WMD					2	3	5	2	6							9				5				4			36	14	
Shoreline Flooding					4				7					4							9						24	15	
Extreme Temperatures							6					1	10				1	1			3						22	16	
Public Health Emergencies					4	1	4					2			1		2			2				2	4		22	16	
Pipeline Accidents			10													7	5										6	28	17
Civil Disturbances							1					1		5										5	2		14	18	
Wildfires								5									6										11	19	
Oil & Gas Well Accidents																8											8	20	
Drought																		2									2	21	
Nuclear Attack																											1	22	
Earthquakes																											0	23	
Scrap Tire Fires																											0	23	
Dam Failures																											0	23	
Nuclear Power Plant Accidents																											0	23	
Subsidence																											0	23	

Note: Where communities ranked a hazard as 1, 2, 3, etc. on the survey, the score, for this table was assigned as 10, 9, 8, etc., respectively. Blank cells indicate a community that did not feel that particular hazard greatly impacted them or they did not complete this portion of the survey. Scores were summed across all communities.

HAZARD RATING ANALYSIS RESULTS - CUMULATIVE COMMUNITY SCORES FOR EACH HAZARD

HAZARD TYPE	COMMUNITY SCORE																									SUM	RANK		
	Armada (Village)	Armada Township	Bruce Township	Center Line	Chesterfield Township	Clinton Township	Eastpointe	Fraser	Harrison Township	Lake *(Not Participating)*	Lenox Township	Macomb Township	Memphis	Mount Clemens	New Baltimore	New Haven	Ray Township	Richmond (City)	Richmond Township	Romeo	Roseville	St. Clair Shores	Shelby Township	Sterling Heights	Utica			Warren	Washington
Tornadoes	9		10	8	8	8	9	2	7		6	9	10	5	10	10	10	8	5	9	6	6	4	4	7	10	7	187	1
Severe Winds	7		10	6		7	10	9	9		6	10	3	9	5	7	10	5	5	7	4	6	5	8	4	9	9	170	2
Ice & Sleet Storms	5		10	6	2	8	7	9	8		6	1	7	5	9	5	10	4	5	8	5	8	2	6	9	7	7	159	3
Snowstorms	3		10	6	3	6	7	10	8		6	1	7	5	8	3	10	3	5	7	5	9	2	4	9	6	7	150	4
Energy Emergencies	2			1	9		4	7	2		10	5	6	10	1	5	8	6	10	2	7	3	10	9	6	5	6	134	5
Transportation Hazmat	1			5	6	2	7	5	10		10	7	9	7		10	10	7	10	1	1	7	9	4	4	1		133	6
Infrastructure Failures	2			3	6	4	5		7		5	6	8	7	7		9	7	4	4	2	8	9	5	3	3	8	122	7
Structural Fires	8			9	5	1	6	9	9		4	3	5			3	7	2	3	4	1	6	6		5	8	10	114	8
Lightning	6		10	5		5		2	9		6	1		4	4	5	9	2	5	1	2	6	2	10	1	4	7	106	9
Terrorism/Sabotage/WMD	8			7	5	7	8	6	8			1		4		8	5	5		6	9		9	2	7			105	10
Transportation Accidents			10	6	8		1	8	5		6	8		5	2	9	10	1	5	5	3	1	2	1			7	103	11
Public Health Emergencies				7	5	1	3	6	4		2	5	4	4	6	2	6	9	1	3	8		7	4	5	3	7	102	12
Hail	4		10	8		6		2	5		6	3		4	9	3	9		5	2	5	3	1	4	2	4	7	102	12
Nuclear Attack	10			10	10	10			8								4	10		10	10		2	4	10			98	13
Fixed Site Hazmat				8	5	6	9		3		2	7		7		6	10	6	1		1	7	8	4				90	14
Civil Disturbances				8	4		2	4	3		9	4		8			4		8		5	4	2	7			4	76	15
River Flooding				9					4		3	9	2	6	5		9		2			10	2		8			69	16
Extreme Temperatures				1	7			5	4		7	4			3		6		6		4	8	2	4			4	65	17
Pipeline Accidents				9		5	3		2		2					5	10		1				3	3		2	5	50	18
Wildfires					5				6		8				1	1	9		7				2					39	19
Drought				5	2				3		4	2					5		3			5	2				6	37	20
Earthquakes				2	1		1		2		1						4	10			1	2				5		29	21
Shoreline Flooding					5				8								3					10						26	22
Oil & Gas Well Accidents											4						10		3				3					20	23
Scrap Tire Fires																4	4		9		1							18	24
Nuclear Power Plant Accidents					10																			4				14	25
Subsidence				4																								4	26
Dam Failures																												0	27

Note: Where a hazard (from supporting individual community tables) resulted in a rank of 1, 2, 3, etc., the score for this table was assigned as 10, 9, 8, etc., respectively. Blank cells indicate a hazard that did not make the top ten hazards for this table or the community did not complete this portion of the survey. Where ranks tied, each hazard was given the same value as equated by the scale. Scores were summed across all communities.

Armada (Village)

HAZARD TYPE	HAZARD ASPECTS							Overall Hazard Rating
	Probability of occurrence	Population affected	Area affected	Potential for casualties	Potential for property damage	Potential for economic disruption	Corollary effects (utilities & community services)	
	5%	10%	15%	25%	25%	5%	15%	
Civil Disturbances	0.1	0.2	0.3	0.5	0.5	0.1	0.2	1.9
Drought	0.1	0.4	0.5	0.3	0.5	0.1	0.5	2.3
Earthquakes	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Energy Emergencies	0.1	0.4	0.3	0.5	0.8	0.2	0.6	2.9
Extreme Temperatures	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Scrap Tire Fires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Structural Fires	0.2	0.4	0.5	1.0	1.0	0.2	0.6	3.9
Wildfires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dam Failures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Riverine Flooding	0.2	0.2	0.3	0.5	0.8	0.2	0.5	2.5
Shoreline Flooding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed Site Hazmat Incident	0.1	0.2	0.3	0.5	0.8	0.2	0.5	2.4
Transportation Hazmat Incident	0.1	0.2	0.3	0.8	0.8	0.2	0.5	2.7
Infrastructure Failures	0.2	0.4	0.5	0.5	0.8	0.2	0.5	2.9
Nuclear Attack	0.1	0.5	0.8	1.3	1.3	0.3	0.8	4.8
Nuclear Power Plant Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil & Gas Well Accidents	0.1	0.3	0.5	0.8	0.5	0.2	0.3	2.6
Pipeline Accidents	0.1	0.2	0.3	0.5	0.5	0.1	0.3	2.0
Public Health Emergencies	0.1	0.3	0.3	0.5	0.3	0.1	0.2	1.7
Terrorism/Sabotage /WMD	0.1	0.4	0.6	1.0	1.0	0.2	0.6	3.9
Subsidence	0.1	0.1	0.2	0.3	0.5	0.1	0.3	1.5
Hail	0.2	0.4	0.6	0.5	1.0	0.1	0.3	3.1
Lightning	0.2	0.5	0.8	0.8	0.8	0.1	0.3	3.3
Severe Winds	0.2	0.4	0.6	1.0	0.8	0.2	0.6	3.7
Tornadoes	0.2	0.4	0.5	1.3	1.3	0.3	0.8	4.5
Transportation Accidents	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Ice & Sleet Storms	0.2	0.3	0.6	0.5	0.8	0.2	0.8	3.2
Snow Storms	0.2	0.3	0.6	0.5	0.8	0.1	0.6	3.0

Bruce

HAZARD TYPE	HAZARD ASPECTS							Overall Hazard Rating
	Probability of occurrence	Population affected	Area affected	Potential for casualties	Potential for property damage	Potential for economic disruption	Corollary effects (utilities & community services)	
	5%	10%	15%	25%	25%	5%	15%	100%
Civil Disturbances	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Drought	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Earthquakes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Energy Emergencies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Extreme Temperatures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scrap Tire Fires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Structural Fires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Wildfires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dam Failures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Riverine Flooding	0.1	0.2	0.3	0.5	0.5	0.1	0.3	2.0
Shoreline Flooding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed Site Hazmat Incident	0.1	0.1	0.2	0.3	0.5	0.1	0.2	1.3
Transportation Hazmat Incident	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Infrastructure Failures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear Attack	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear Power Plant Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil & Gas Well Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pipeline Accidents	0.1	0.2	0.5	0.3	0.8	0.1	0.2	2.0
Public Health Emergencies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Terrorism/Sabotage/WMD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subsidence	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hail	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Lightning	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Severe Winds	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Tornadoes	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Transportation Accidents	0.1	0.2	0.3	0.5	0.5	0.1	0.3	2.0
Ice & Sleet Storms	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Snow Storms	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0

Center Line

HAZARD TYPE	HAZARD ASPECTS							Overall Hazard Rating
	Probability of occurrence	Population affected	Area affected	Potential for casualties	Potential for property damage	Potential for economic disruption	Corollary effects (utilities & community services)	
	5%	10%	15%	25%	25%	5%	15%	
Civil Disturbances	0.2	0.4	0.5	0.8	0.8	0.1	0.5	3.1
Drought	0.2	0.5	0.8	0.5	0.5	0.1	0.3	2.8
Earthquakes	0.1	0.5	0.0	0.0	0.0	0.0	0.0	0.6
Energy Emergencies	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Extreme Temperatures	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Scrap Tire Fires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Structural Fires	0.2	0.4	0.6	1.0	1.0	0.1	0.0	3.3
Wildfires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dam Failures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Riverine Flooding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Shoreline Flooding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed Site Hazmat Incident	0.2	0.3	0.5	0.8	0.8	0.1	0.0	2.6
Transportation Hazmat Incident	0.2	0.3	0.5	0.8	0.8	0.1	0.0	2.6
Infrastructure Failures	0.2	0.2	0.3	0.5	0.5	0.1	0.0	1.8
Nuclear Attack	0.2	0.5	0.8	1.3	1.3	0.3	0.0	4.2
Nuclear Power Plant Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil & Gas Well Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pipeline Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Public Health Emergencies	0.2	0.5	0.8	1.0	0.3	0.2	0.0	2.9
Terrorism/Sabotage /WMD	0.2	0.5	0.8	1.0	0.3	0.2	0.0	2.9
Subsidence	0.2	0.0	0.6	1.0	0.0	0.1	0.0	1.9
Hail	0.2	0.4	0.6	1.0	0.8	0.1	0.0	3.1
Lightning	0.2	0.4	0.6	0.5	0.8	0.1	0.0	2.6
Severe Winds	0.2	0.4	0.6	0.8	0.8	0.1	0.0	2.8
Tornadoes	0.2	0.4	0.6	1.0	0.8	0.1	0.0	3.1
Transportation Accidents	0.2	0.3	0.5	0.8	1.0	0.1	0.0	2.8
Ice & Sleet Storms	0.2	0.4	0.6	0.8	0.8	0.1	0.0	2.8
Snow Storms	0.2	0.4	0.6	0.8	0.8	0.1	0.0	2.8

Chesterfield

HAZARD TYPE	HAZARD ASPECTS							Overall Hazard Rating
	Probability of occurrence	Population affected	Area affected	Potential for casualties	Potential for property damage	Potential for economic disruption	Corollary effects (utilities & community services)	
	5%	10%	15%	25%	25%	5%	15%	
Civil Disturbances	0.1	0.2	0.3	0.8	0.8	0.2	0.5	2.7
Drought	0.1	0.2	0.3	0.8	0.5	0.1	0.3	2.3
Earthquakes	0.0	0.0	0.0	0.8	0.8	0.2	0.5	2.1
Energy Emergencies	0.2	0.5	0.8	1.0	0.8	0.3	0.8	4.2
Extreme Temperatures	0.2	0.4	0.6	0.8	0.8	0.2	0.5	3.3
Scrap Tire Fires	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Structural Fires	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Wildfires	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Dam Failures	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Riverine Flooding	0.1	0.2	0.3	0.5	0.5	0.1	0.3	2.0
Shoreline Flooding	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Fixed Site Hazmat Incident	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.1
Transportation Hazmat Incident	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.1
Infrastructure Failures	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.1
Nuclear Attack	0.1	0.5	0.8	1.0	1.0	0.3	0.8	4.3
Nuclear Power Plant Accidents	0.1	0.5	0.8	1.0	1.0	0.3	0.8	4.3
Oil & Gas Well Accidents	0.1	0.1	0.3	0.5	0.5	0.1	0.3	1.9
Pipeline Accidents	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Public Health Emergencies	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Terrorism/Sabotage /WMD	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Subsidence	0.1	0.2	0.3	0.3	0.3	0.1	0.2	1.3
Hail	0.2	0.3	0.5	0.3	0.5	0.1	0.2	1.9
Lightning	0.2	0.1	0.2	0.3	0.3	0.1	0.2	1.1
Severe Winds	0.2	0.2	0.2	0.3	0.3	0.1	0.2	1.2
Tornadoes	0.2	0.4	0.6	1.0	1.0	0.2	0.6	4.0
Transportation Accidents	0.2	0.4	0.6	1.0	1.0	0.2	0.6	4.0
Ice & Sleet Storms	0.2	0.4	0.3	0.5	0.5	0.1	0.3	2.3
Snow Storms	0.2	0.4	0.6	0.5	0.5	0.1	0.3	2.6

Clinton Township

HAZARD TYPE	HAZARD ASPECTS							Overall Hazard Rating
	Probability of occurrence	Population affected	Area affected	Potential for casualties	Potential for property damage	Potential for economic disruption	Corollary effects (utilities & community services)	
	5%	10%	15%	25%	25%	5%	15%	
Civil Disturbances	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.1
Drought	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Earthquakes	0.1	0.1	0.2	0.5	0.5	0.1	0.3	1.7
Energy Emergencies	0.1	0.2	0.3	0.5	0.5	0.1	0.3	2.0
Extreme Temperatures	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Scrap Tire Fires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Structural Fires	0.2	0.1	0.2	0.8	0.8	0.1	0.2	2.1
Wildfires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dam Failures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Riverine Flooding	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Shoreline Flooding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed Site Hazmat Incident	0.1	0.5	0.8	1.3	0.8	0.2	0.2	3.7
Transportation Hazmat Incident	0.2	0.2	0.3	0.8	0.5	0.1	0.2	2.2
Infrastructure Failures	0.1	0.4	0.6	0.5	0.5	0.2	0.2	2.4
Nuclear Attack	0.1	0.5	0.8	1.3	1.3	0.3	0.8	4.8
Nuclear Power Plant Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil & Gas Well Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pipeline Accidents	0.1	0.3	0.5	0.5	0.5	0.2	0.3	2.3
Public Health Emergencies	0.1	0.3	0.5	0.8	0.3	0.1	0.2	2.1
Terrorism/Sabotage /WMD	0.1	0.4	0.6	1.0	0.8	0.2	0.5	3.5
Subsidence	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Hail	0.1	0.5	0.8	0.8	0.8	0.1	0.3	3.2
Lightning	0.2	0.2	0.3	0.8	0.8	0.1	0.3	2.6
Severe Winds	0.2	0.5	0.8	0.8	0.8	0.1	0.5	3.5
Tornadoes	0.1	0.4	0.6	0.8	1.0	0.2	0.6	3.6
Transportation Accidents	0.2	0.2	0.3	0.5	0.5	0.1	0.3	2.0
Ice & Sleet Storms	0.2	0.5	0.8	0.5	1.0	0.1	0.6	3.6
Snow Storms	0.2	0.5	0.8	0.5	0.8	0.1	0.5	3.2

Eastpointe

HAZARD TYPE	HAZARD ASPECTS							Overall Hazard Rating
	Probability of occurrence	Population affected	Area affected	Potential for casualties	Potential for property damage	Potential for economic disruption	Corollary effects (utilities & community services)	
	5%	10%	15%	25%	25%	5%	15%	
Civil Disturbances	0.1	0.2	0.3	0.5	0.5	0.1	0.3	2.0
Drought	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Earthquakes	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Energy Emergencies	0.2	0.3	0.5	0.3	0.3	0.2	0.6	2.2
Extreme Temperatures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scrap Tire Fires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Structural Fires	0.2	0.2	0.3	0.8	0.8	0.2	0.5	2.8
Wildfires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dam Failures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Riverine Flooding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Shoreline Flooding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed Site Hazmat Incident	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Transportation Hazmat Incident	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Infrastructure Failures	0.2	0.4	0.6	0.3	0.3	0.2	0.6	2.5
Nuclear Attack	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear Power Plant Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil & Gas Well Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pipeline Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Public Health Emergencies	0.1	0.3	0.3	0.8	0.0	0.2	0.5	2.1
Terrorism/Sabotage /WMD	0.2	0.3	0.5	1.0	1.0	0.1	0.3	3.4
Subsidence	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hail	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lightning	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Severe Winds	0.2	0.4	0.6	0.8	1.0	0.2	0.6	3.8
Tornadoes	0.2	0.4	0.6	0.8	1.0	0.2	0.6	3.7
Transportation Accidents	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Ice & Sleet Storms	0.2	0.4	0.6	0.3	0.8	0.2	0.6	3.0
Snow Storms	0.2	0.4	0.6	0.3	0.8	0.2	0.6	3.0

Fraser

HAZARD TYPE	HAZARD ASPECTS							Overall Hazard Rating
	Probability of occurrence	Population affected	Area affected	Potential for casualties	Potential for property damage	Potential for economic disruption	Corollary effects (utilities & community services)	
	5%	10%	15%	25%	25%	5%	15%	
Civil Disturbances	0.1	0.2	0.3	1.0	0.5	0.1	0.5	2.7
Drought	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Earthquakes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Energy Emergencies	0.2	0.5	0.8	0.5	0.3	0.3	0.6	3.1
Extreme Temperatures	0.1	0.3	0.5	0.8	0.5	0.1	0.6	2.8
Scrap Tire Fires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Structural Fires	0.2	0.3	0.3	1.0	1.0	0.2	0.5	3.4
Wildfires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dam Failures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Riverine Flooding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Shoreline Flooding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed Site Hazmat Incident	0.1	0.2	0.3	0.5	0.8	0.2	0.6	2.6
Transportation Hazmat Incident	0.2	0.3	0.5	0.5	0.8	0.2	0.5	2.8
Infrastructure Failures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear Attack	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear Power Plant Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil & Gas Well Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pipeline Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Public Health Emergencies	0.2	0.3	0.5	1.0	0.5	0.2	0.5	3.0
Terrorism/Sabotage /WMD	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Subsidence	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hail	0.1	0.2	0.3	0.5	0.8	0.1	0.5	2.4
Lightning	0.1	0.2	0.3	0.5	0.8	0.1	0.5	2.4
Severe Winds	0.2	0.3	0.5	0.8	1.0	0.2	0.6	3.4
Tornadoes	0.1	0.2	0.3	0.5	0.8	0.1	0.5	2.4
Transportation Accidents	0.2	0.3	0.5	0.8	1.0	0.2	0.5	3.3
Ice & Sleet Storms	0.2	0.3	0.5	1.0	0.8	0.2	0.6	3.4
Snow Storms	0.2	0.3	0.5	1.0	1.0	0.2	0.5	3.5

Harrison Township

HAZARD TYPE	HAZARD ASPECTS							Overall Hazard Rating
	Probability of occurrence	Population affected	Area affected	Potential for casualties	Potential for property damage	Potential for economic disruption	Corollary effects (utilities & community services)	
	5%	10%	15%	25%	25%	5%	15%	
Civil Disturbances	0.1	0.2	0.3	0.5	0.5	0.1	0.5	2.1
Drought	0.1	0.2	0.3	0.5	0.5	0.1	0.5	2.1
Earthquakes	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Energy Emergencies	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Extreme Temperatures	0.1	0.2	0.3	0.8	0.8	0.2	0.8	3.0
Scrap Tire Fires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Structural Fires	0.3	0.5	0.8	1.0	1.0	0.2	0.5	4.1
Wildfires	0.2	0.3	0.6	0.8	1.0	0.2	0.6	3.6
Dam Failures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Riverine Flooding	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Shoreline Flooding	0.2	0.4	0.6	1.0	1.0	0.2	0.6	4.0
Fixed Site Hazmat Incident	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Transportation Hazmat Incident	0.2	0.4	0.6	1.0	1.0	0.3	0.8	4.2
Infrastructure Failures	0.2	0.3	0.6	1.0	1.0	0.2	0.6	3.9
Nuclear Attack	0.2	0.4	0.6	1.0	1.0	0.2	0.6	4.0
Nuclear Power Plant Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil & Gas Well Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pipeline Accidents	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Public Health Emergencies	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Terrorism/Sabotage /WMD	0.2	0.4	0.6	1.0	1.0	0.2	0.6	4.0
Subsidence	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hail	0.2	0.3	0.5	0.8	1.0	0.2	0.5	3.3
Lightning	0.2	0.3	0.6	1.0	1.3	0.2	0.6	4.1
Severe Winds	0.2	0.3	0.6	1.0	1.3	0.2	0.6	4.1
Tornadoes	0.2	0.4	0.6	1.0	1.0	0.2	0.6	3.9
Transportation Accidents	0.2	0.3	0.5	0.8	0.8	0.2	0.6	3.3
Ice & Sleet Storms	0.2	0.4	0.6	1.0	1.0	0.2	0.6	4.0
Snow Storms	0.2	0.4	0.6	1.0	1.0	0.2	0.6	4.0

Lenox

HAZARD TYPE	HAZARD ASPECTS							Overall Hazard Rating
	Probability of occurrence	Population affected	Area affected	Potential for casualties	Potential for property damage	Potential for economic disruption	Corollary effects (utilities & community services)	
	5%	10%	15%	25%	25%	5%	15%	
Civil Disturbances	0.1	0.1	0.2	1.0	0.8	0.1	0.3	2.5
Drought	0.1	0.1	0.5	0.3	0.5	0.2	0.0	1.5
Earthquakes	0.0	0.0	0.2	0.3	0.3	0.1	0.2	0.9
Energy Emergencies	0.3	0.5	0.8	0.5	0.3	0.3	0.5	3.0
Extreme Temperatures	0.2	0.3	0.5	0.8	0.3	0.1	0.2	2.2
Scrap Tire Fires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Structural Fires	0.1	0.2	0.2	0.5	0.5	0.0	0.0	1.5
Wildfires	0.1	0.3	0.5	0.5	0.8	0.1	0.2	2.3
Dam Failures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Riverine Flooding	0.2	0.2	0.3	0.0	0.3	0.1	0.2	1.1
Shoreline Flooding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed Site Hazmat Incident	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Transportation Hazmat Incident	0.1	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Infrastructure Failures	0.3	0.3	0.8	0.3	0.3	0.1	0.2	2.0
Nuclear Attack	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear Power Plant Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil & Gas Well Accidents	0.2	0.3	0.3	0.3	0.3	0.1	0.2	1.5
Pipeline Accidents	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Public Health Emergencies	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Terrorism/Sabotage /WMD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subsidence	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hail	0.2	0.3	0.5	0.5	0.5	0.1	0.2	2.1
Lightning	0.2	0.3	0.5	0.5	0.5	0.1	0.2	2.1
Severe Winds	0.2	0.3	0.5	0.5	0.5	0.1	0.2	2.1
Tornadoes	0.2	0.3	0.5	0.5	0.5	0.1	0.2	2.1
Transportation Accidents	0.2	0.3	0.5	0.5	0.5	0.1	0.2	2.1
Ice & Sleet Storms	0.2	0.3	0.5	0.5	0.5	0.1	0.2	2.1
Snow Storms	0.2	0.3	0.5	0.5	0.5	0.1	0.2	2.1

Macomb Township

HAZARD TYPE	HAZARD ASPECTS							Overall Hazard Rating
	Probability of occurrence	Population affected	Area affected	Potential for casualties	Potential for property damage	Potential for economic disruption	Corollary effects (utilities & community services)	
	5%	10%	15%	25%	25%	5%	15%	
Civil Disturbances	0.1	0.1	0.2	0.5	0.5	0.1	0.5	1.9
Drought	0.1	0.1	0.2	0.5	0.3	0.1	0.3	1.4
Earthquakes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Energy Emergencies	0.2	0.3	0.3	0.5	0.3	0.2	0.5	2.1
Extreme Temperatures	0.1	0.2	0.3	0.5	0.5	0.1	0.3	1.9
Scrap Tire Fires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Structural Fires	0.1	0.1	0.2	0.5	0.5	0.1	0.2	1.6
Wildfires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dam Failures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Riverine Flooding	0.2	0.3	0.5	0.8	0.8	0.2	0.6	3.2
Shoreline Flooding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed Site Hazmat Incident	0.1	0.3	0.5	0.8	0.5	0.2	0.5	2.7
Transportation Hazmat Incident	0.1	0.3	0.5	0.8	0.5	0.2	0.5	2.7
Infrastructure Failures	0.2	0.3	0.5	0.5	0.5	0.1	0.5	2.4
Nuclear Attack	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear Power Plant Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil & Gas Well Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pipeline Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Public Health Emergencies	0.1	0.3	0.2	0.8	0.3	0.2	0.5	2.1
Terrorism/Sabotage /WMD	0.1	0.1	0.3	0.3	0.3	0.1	0.3	1.3
Subsidence	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hail	0.1	0.1	0.2	0.3	0.8	0.1	0.2	1.6
Lightning	0.1	0.1	0.2	0.5	0.3	0.1	0.2	1.3
Severe Winds	0.2	0.3	0.5	0.8	1.0	0.2	0.6	3.5
Tornadoes	0.2	0.3	0.5	0.8	0.8	0.2	0.6	3.2
Transportation Accidents	0.1	0.3	0.5	0.8	0.5	0.2	0.6	2.9
Ice & Sleet Storms	0.1	0.1	0.2	0.5	0.3	0.1	0.2	1.3
Snow Storms	0.1	0.1	0.2	0.5	0.3	0.1	0.2	1.3

Memphis

HAZARD TYPE	HAZARD ASPECTS							Overall Hazard Rating
	Probability of occurrence	Population affected	Area affected	Potential for casualties	Potential for property damage	Potential for economic disruption	Corollary effects (utilities & community services)	
	5%	10%	15%	25%	25%	5%	15%	
Civil Disturbances	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Drought	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Earthquakes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Energy Emergencies	0.2	0.5	0.8	0.3	0.3	0.3	0.8	3.0
Extreme Temperatures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scrap Tire Fires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Structural Fires	0.3	0.3	0.5	0.0	0.8	0.2	0.5	2.4
Wildfires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dam Failures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Riverine Flooding	0.2	0.1	0.2	0.0	1.0	0.2	0.0	1.7
Shoreline Flooding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed Site Hazmat Incident	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Transportation Hazmat Incident	0.3	0.4	0.6	0.8	0.8	0.3	0.6	3.6
Infrastructure Failures	0.3	0.5	0.8	0.3	0.8	0.2	0.6	3.3
Nuclear Attack	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear Power Plant Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil & Gas Well Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pipeline Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Public Health Emergencies	0.1	0.5	0.8	0.0	0.0	0.3	0.6	2.2
Terrorism/Sabotage /WMD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subsidence	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hail	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lightning	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Severe Winds	0.1	0.5	0.8	0.0	0.5	0.1	0.2	2.1
Tornadoes	0.2	0.5	0.8	0.3	1.3	0.3	0.8	3.9
Transportation Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ice & Sleet Storms	0.2	0.5	0.8	0.0	1.0	0.2	0.5	3.1
Snow Storms	0.2	0.5	0.8	0.0	1.0	0.2	0.5	3.1

Mount Clemens

HAZARD TYPE	HAZARD ASPECTS							Overall Hazard Rating
	Probability of occurrence	Population affected	Area affected	Potential for casualties	Potential for property damage	Potential for economic disruption	Corollary effects (utilities & community services)	
	5%	10%	15%	25%	25%	5%	15%	
Civil Disturbances	0.1	0.2	0.3	0.5	0.8	0.2	0.6	2.6
Drought	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Earthquakes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Energy Emergencies	0.2	0.4	0.6	1.0	0.5	0.2	0.6	3.5
Extreme Temperatures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scrap Tire Fires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Structural Fires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Wildfires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dam Failures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Riverine Flooding	0.2	0.2	0.3	0.3	0.8	0.1	0.5	2.2
Shoreline Flooding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed Site Hazmat Incident	0.1	0.3	0.5	0.8	0.3	0.2	0.5	2.5
Transportation Hazmat Incident	0.1	0.3	0.5	0.8	0.3	0.2	0.5	2.5
Infrastructure Failures	0.1	0.3	0.5	0.8	0.3	0.2	0.5	2.5
Nuclear Attack	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear Power Plant Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil & Gas Well Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pipeline Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Public Health Emergencies	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Terrorism/Sabotage /WMD	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Subsidence	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hail	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Lightning	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Severe Winds	0.2	0.3	0.5	0.5	0.8	0.2	0.5	2.8
Tornadoes	0.1	0.2	0.3	0.5	0.5	0.1	0.3	2.0
Transportation Accidents	0.1	0.2	0.3	0.5	0.5	0.1	0.3	2.0
Ice & Sleet Storms	0.1	0.2	0.3	0.5	0.5	0.1	0.3	2.0
Snow Storms	0.1	0.2	0.3	0.5	0.5	0.1	0.3	2.0

New Baltimore

HAZARD TYPE	HAZARD ASPECTS							Overall Hazard Rating
	Probability of occurrence	Population affected	Area affected	Potential for casualties	Potential for property damage	Potential for economic disruption	Corollary effects (utilities & community services)	
	5%	10%	15%	25%	25%	5%	15%	
Civil Disturbances	0.1	0.1	0.3	0.3	0.5	0.1	0.3	1.6
Drought	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Earthquakes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Energy Emergencies	0.1	0.4	0.6	0.3	0.3	0.2	0.5	2.2
Extreme Temperatures	0.1	0.3	0.8	0.5	0.5	0.1	0.3	2.5
Scrap Tire Fires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Structural Fires	0.1	0.2	0.5	0.5	0.5	0.1	0.2	2.0
Wildfires	0.1	0.3	0.6	0.5	0.5	0.1	0.2	2.2
Dam Failures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Riverine Flooding	0.2	0.5	0.6	0.5	1.3	0.1	0.2	3.2
Shoreline Flooding	0.1	0.2	0.2	0.3	0.5	0.1	0.2	1.4
Fixed Site Hazmat Incident	0.2	0.3	0.3	0.8	0.3	0.1	0.2	2.0
Transportation Hazmat Incident	0.1	0.2	0.3	0.5	0.5	0.1	0.3	2.0
Infrastructure Failures	0.2	0.4	0.8	0.8	0.8	0.2	0.6	3.6
Nuclear Attack	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear Power Plant Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil & Gas Well Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pipeline Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Public Health Emergencies	0.1	0.3	0.5	1.0	0.8	0.2	0.6	3.4
Terrorism/Sabotage /WMD	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Subsidence	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hail	0.2	0.3	0.6	1.3	1.3	0.2	0.6	4.4
Lightning	0.2	0.2	0.6	0.5	0.8	0.1	0.6	3.0
Severe Winds	0.2	0.3	0.5	0.5	1.0	0.2	0.6	3.2
Tornadoes	0.2	0.5	0.8	1.3	1.3	0.3	0.8	5.0
Transportation Accidents	0.1	0.2	0.6	0.5	0.5	0.1	0.3	2.3
Ice & Sleet Storms	0.2	0.4	0.6	1.0	1.3	0.2	0.8	4.4
Snow Storms	0.3	0.4	0.6	0.8	0.8	0.2	0.8	3.7

New Haven

HAZARD TYPE	HAZARD ASPECTS							Overall Hazard Rating
	Probability of occurrence	Population affected	Area affected	Potential for casualties	Potential for property damage	Potential for economic disruption	Corollary effects (utilities & community services)	
	5%	10%	15%	25%	25%	5%	15%	
Civil Disturbances	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Drought	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Earthquakes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Energy Emergencies	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Extreme Temperatures	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Scrap Tire Fires	0.2	0.3	0.5	0.3	0.8	0.1	0.5	2.4
Structural Fires	0.1	0.3	0.2	0.8	0.8	0.1	0.2	2.2
Wildfires	0.1	0.1	0.2	0.3	0.8	0.1	0.5	1.8
Dam Failures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Riverine Flooding	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.1
Shoreline Flooding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed Site Hazmat Incident	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Transportation Hazmat Incident	0.2	0.4	0.6	1.0	1.0	0.2	0.6	4.0
Infrastructure Failures	0.1	0.3	0.5	0.3	0.3	0.1	0.2	1.5
Nuclear Attack	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear Power Plant Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil & Gas Well Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pipeline Accidents	0.2	0.4	0.6	0.5	0.5	0.2	0.5	2.8
Public Health Emergencies	0.2	0.3	0.5	0.8	0.3	0.1	0.2	2.1
Terrorism/Sabotage /WMD	0.1	0.3	0.8	0.8	0.8	0.2	0.5	3.2
Subsidence	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hail	0.2	0.3	0.5	0.3	0.8	0.2	0.2	2.2
Lightning	0.2	0.3	0.5	0.8	0.8	0.1	0.3	2.8
Severe Winds	0.2	0.3	0.5	0.5	1.0	0.1	0.6	3.1
Tornadoes	0.2	0.4	0.6	1.0	1.0	0.2	0.6	4.0
Transportation Accidents	0.3	0.3	0.6	1.0	0.8	0.2	0.6	3.7
Ice & Sleet Storms	0.2	0.3	0.6	0.5	0.8	0.1	0.3	2.8
Snow Storms	0.1	0.4	0.6	0.3	0.3	0.2	0.5	2.2

Ray

HAZARD TYPE	HAZARD ASPECTS							Overall Hazard Rating
	Probability of occurrence	Population affected	Area affected	Potential for casualties	Potential for property damage	Potential for economic disruption	Corollary effects (utilities & community services)	
	5%	10%	15%	25%	25%	5%	15%	
Civil Disturbances	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Drought	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Earthquakes	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Energy Emergencies	0.2	0.5	0.8	0.5	1.0	0.2	0.6	3.8
Extreme Temperatures	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Scrap Tire Fires	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Structural Fires	0.2	0.3	0.6	0.8	1.3	0.1	0.3	3.5
Wildfires	0.2	0.4	0.6	1.0	1.0	0.2	0.6	4.0
Dam Failures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Riverine Flooding	0.2	0.4	0.6	1.0	1.0	0.2	0.6	4.0
Shoreline Flooding	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.5
Fixed Site Hazmat Incident	0.3	0.5	0.8	1.3	1.3	0.3	0.8	5.0
Transportation Hazmat Incident	0.3	0.5	0.8	1.3	1.3	0.3	0.8	5.0
Infrastructure Failures	0.2	0.4	0.6	1.0	1.0	0.2	0.6	4.0
Nuclear Attack	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Nuclear Power Plant Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil & Gas Well Accidents	0.3	0.5	0.8	1.3	1.3	0.3	0.8	5.0
Pipeline Accidents	0.3	0.5	0.8	1.3	1.3	0.3	0.8	5.0
Public Health Emergencies	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Terrorism/Sabotage /WMD	0.1	0.2	0.3	0.5	0.5	0.1	0.3	2.0
Subsidence	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hail	0.2	0.4	0.6	1.0	1.0	0.2	0.6	4.0
Lightning	0.2	0.4	0.6	1.0	1.0	0.2	0.6	4.0
Severe Winds	0.3	0.5	0.8	1.3	1.3	0.3	0.8	5.0
Tornadoes	0.3	0.5	0.8	1.3	1.3	0.3	0.8	5.0
Transportation Accidents	0.3	0.5	0.8	1.3	1.3	0.3	0.8	5.0
Ice & Sleet Storms	0.3	0.5	0.8	1.3	1.3	0.3	0.8	5.0
Snow Storms	0.3	0.5	0.8	1.3	1.3	0.3	0.8	5.0

Richmond (Township)

HAZARD TYPE	HAZARD ASPECTS							Overall Hazard Rating
	Probability of occurrence	Population affected	Area affected	Potential for casualties	Potential for property damage	Potential for economic disruption	Corollary effects (utilities & community services)	
	5%	10%	15%	25%	25%	5%	15%	
Civil Disturbances	0.1	0.1	0.2	1.0	0.8	0.1	0.3	2.5
Drought	0.1	0.1	0.5	0.3	0.5	0.2	0.0	1.5
Earthquakes	0.0	0.0	0.2	0.3	0.3	0.1	0.2	0.9
Energy Emergencies	0.3	0.5	0.8	0.5	0.3	0.3	0.5	3.0
Extreme Temperatures	0.2	0.3	0.5	0.8	0.3	0.1	0.2	2.2
Scrap Tire Fires	0.2	0.3	0.5	0.3	1.0	0.2	0.5	2.8
Structural Fires	0.1	0.2	0.2	0.5	0.5	0.0	0.0	1.5
Wildfires	0.1	0.3	0.5	0.5	0.8	0.1	0.2	2.3
Dam Failures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Riverine Flooding	0.2	0.2	0.3	0.0	0.3	0.1	0.2	1.1
Shoreline Flooding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed Site Hazmat Incident	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Transportation Hazmat Incident	0.1	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Infrastructure Failures	0.3	0.3	0.8	0.3	0.3	0.1	0.2	2.0
Nuclear Attack	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear Power Plant Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil & Gas Well Accidents	0.2	0.3	0.3	0.3	0.3	0.1	0.2	1.5
Pipeline Accidents	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Public Health Emergencies	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Terrorism/Sabotage /WMD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subsidence	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hail	0.2	0.3	0.5	0.5	0.5	0.1	0.2	2.1
Lightning	0.2	0.3	0.5	0.5	0.5	0.1	0.2	2.1
Severe Winds	0.2	0.3	0.5	0.5	0.5	0.1	0.2	2.1
Tornadoes	0.2	0.3	0.5	0.5	0.5	0.1	0.2	2.1
Transportation Accidents	0.2	0.3	0.5	0.5	0.5	0.1	0.2	2.1
Ice & Sleet Storms	0.2	0.3	0.5	0.5	0.5	0.1	0.2	2.1
Snow Storms	0.2	0.3	0.5	0.5	0.5	0.1	0.2	2.1

City of Richmond

HAZARD TYPE	HAZARD ASPECTS							Overall Hazard Rating
	Probability of occurrence	Population affected	Area affected	Potential for casualties	Potential for property damage	Potential for economic disruption	Corollary effects (utilities & community services)	
	5%	10%	15%	25%	25%	5%	15%	
Civil Disturbances	0.1	0.2	0.2	0.3	0.8	0.2	0.3	1.9
Drought	0.1	0.1	0.8	0.3	0.3	0.2	0.5	2.1
Earthquakes	0.1	0.5	0.8	1.3	1.3	0.3	0.8	4.8
Energy Emergencies	0.2	0.5	0.8	0.5	0.8	0.2	0.3	3.2
Extreme Temperatures	0.1	0.2	0.8	0.5	0.3	0.1	0.3	2.2
Scrap Tire Fires	0.1	0.1	0.2	0.3	0.5	0.1	0.2	1.3
Structural Fires	0.2	0.2	0.2	0.8	0.8	0.2	0.3	2.5
Wildfires	0.1	0.1	0.2	0.3	0.5	0.1	0.2	1.3
Dam Failures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Riverine Flooding	0.1	0.1	0.2	0.3	0.3	0.1	0.3	1.2
Shoreline Flooding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed Site Hazmat Incident	0.1	0.3	0.6	0.8	0.8	0.3	0.5	3.2
Transportation Hazmat Incident	0.2	0.4	0.6	0.8	0.8	0.2	0.5	3.3
Infrastructure Failures	0.2	0.3	0.5	0.5	1.0	0.2	0.6	3.3
Nuclear Attack	0.1	0.5	0.8	1.3	1.3	0.3	0.8	4.8
Nuclear Power Plant Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil & Gas Well Accidents	0.1	0.2	0.3	0.5	0.3	0.1	0.2	1.6
Pipeline Accidents	0.1	0.2	0.3	0.5	0.5	0.1	0.3	2.0
Public Health Emergencies	0.1	0.5	0.8	1.3	0.8	0.3	0.3	3.9
Terrorism/Sabotage /WMD	0.1	0.4	0.5	0.8	0.8	0.2	0.5	3.1
Subsidence	0.1	0.1	0.3	0.3	0.8	0.1	0.5	2.0
Hail	0.1	0.1	0.8	0.3	0.8	0.1	0.2	2.2
Lightning	0.3	0.2	0.5	0.5	0.5	0.2	0.5	2.5
Severe Winds	0.3	0.2	0.8	0.5	0.8	0.2	0.5	3.1
Tornadoes	0.1	0.4	0.8	1.0	1.0	0.2	0.5	3.8
Transportation Accidents	0.1	0.2	0.2	0.5	1.0	0.2	0.3	2.4
Ice & Sleet Storms	0.1	0.2	0.8	0.5	0.8	0.2	0.5	2.9
Snow Storms	0.3	0.2	0.8	0.5	0.5	0.1	0.5	2.8

Romeo

HAZARD TYPE	HAZARD ASPECTS							Overall Hazard Rating
	Probability of occurrence	Population affected	Area affected	Potential for casualties	Potential for property damage	Potential for economic disruption	Corollary effects (utilities & community services)	
	5%	10%	15%	25%	25%	5%	15%	
Civil Disturbances	0.1	0.2	0.5	0.5	0.8	0.1	0.3	2.4
Drought	0.1	0.3	0.5	0.8	0.5	0.1	0.5	2.7
Earthquakes	0.1	0.1	0.3	0.3	0.3	0.1	0.2	1.2
Energy Emergencies	0.2	0.4	0.6	0.3	0.5	0.2	0.6	2.7
Extreme Temperatures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scrap Tire Fires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Structural Fires	0.1	0.2	0.5	0.8	1.0	0.2	0.5	3.2
Wildfires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dam Failures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Riverine Flooding	0.1	0.1	0.3	0.3	0.5	0.1	0.3	1.7
Shoreline Flooding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed Site Hazmat Incident	0.1	0.3	0.5	0.5	0.8	0.1	0.3	2.5
Transportation Hazmat Incident	0.2	0.3	0.5	0.5	0.8	0.1	0.3	2.6
Infrastructure Failures	0.1	0.4	0.6	0.5	0.8	0.2	0.6	3.2
Nuclear Attack	0.1	0.5	0.8	1.3	1.3	0.3	0.8	4.8
Nuclear Power Plant Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil & Gas Well Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pipeline Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Public Health Emergencies	0.1	0.3	0.5	1.0	0.5	0.2	0.6	3.1
Terrorism/Sabotage /WMD	0.1	0.4	0.5	0.8	0.8	0.2	0.8	3.4
Subsidence	0.1	0.2	0.2	0.5	0.5	0.1	0.2	1.7
Hail	0.2	0.3	0.6	0.5	0.8	0.1	0.3	2.7
Lightning	0.2	0.2	0.3	0.8	0.8	0.1	0.3	2.6
Severe Winds	0.2	0.4	0.6	0.8	1.0	0.2	0.6	3.7
Tornadoes	0.2	0.4	0.8	1.0	1.3	0.3	0.8	4.6
Transportation Accidents	0.2	0.3	0.5	0.8	0.8	0.2	0.6	3.3
Ice & Sleet Storms	0.2	0.4	0.8	0.8	1.0	0.2	0.6	3.9
Snow Storms	0.3	0.5	0.8	0.5	0.8	0.2	0.8	3.7

Roseville

HAZARD TYPE	HAZARD ASPECTS							Overall Hazard Rating
	Probability of occurrence	Population affected	Area affected	Potential for casualties	Potential for property damage	Potential for economic disruption	Corollary effects (utilities & community services)	
	5%	10%	15%	25%	25%	5%	15%	
Civil Disturbances	0.2	0.3	0.6	0.8	0.8	0.2	0.3	3.0
Drought	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Earthquakes	0.1	0.2	0.3	0.5	0.5	0.1	0.3	2.0
Energy Emergencies	0.2	0.4	0.6	0.8	1.0	0.2	0.6	3.7
Extreme Temperatures	0.2	0.3	0.5	0.8	0.5	0.1	0.5	2.7
Scrap Tire Fires	0.1	0.2	0.3	0.5	0.5	0.1	0.3	2.0
Structural Fires	0.1	0.2	0.3	0.5	0.5	0.1	0.3	2.0
Wildfires	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Dam Failures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Riverine Flooding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Shoreline Flooding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed Site Hazmat Incident	0.1	0.2	0.3	0.5	0.5	0.1	0.3	2.0
Transportation Hazmat Incident	0.1	0.2	0.3	0.5	0.5	0.1	0.3	2.0
Infrastructure Failures	0.1	0.3	0.5	0.5	0.5	0.2	0.5	2.5
Nuclear Attack	0.3	0.5	0.8	1.3	1.3	0.3	0.8	5.0
Nuclear Power Plant Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil & Gas Well Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pipeline Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Public Health Emergencies	0.2	0.5	0.8	1.0	0.8	0.2	0.8	4.2
Terrorism/Sabotage /WMD	0.2	0.5	0.8	1.3	1.3	0.3	0.8	4.9
Subsidence	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hail	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Lightning	0.2	0.2	0.3	0.8	0.5	0.1	0.5	2.5
Severe Winds	0.2	0.3	0.5	0.5	0.8	0.1	0.5	2.7
Tornadoes	0.1	0.3	0.5	0.8	1.0	0.2	0.5	3.2
Transportation Accidents	0.2	0.2	0.5	0.8	0.5	0.1	0.5	2.6
Ice & Sleet Storms	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Snow Storms	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0

Shelby

HAZARD TYPE	HAZARD ASPECTS							Overall Hazard Rating
	Probability of occurrence	Population affected	Area affected	Potential for casualties	Potential for property damage	Potential for economic disruption	Corollary effects (utilities & community services)	
	5%	10%	15%	25%	25%	5%	15%	
Civil Disturbances	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Drought	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Earthquakes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Energy Emergencies	0.2	0.3	0.8	0.3	0.8	0.3	0.8	3.2
Extreme Temperatures	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Scrap Tire Fires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Structural Fires	0.2	0.3	0.5	0.8	0.8	0.1	0.2	2.6
Wildfires	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Dam Failures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Riverine Flooding	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Shoreline Flooding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed Site Hazmat Incident	0.2	0.3	0.5	0.8	0.8	0.2	0.3	2.9
Transportation Hazmat Incident	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Infrastructure Failures	0.1	0.5	0.8	0.3	0.8	0.1	0.6	3.0
Nuclear Attack	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Nuclear Power Plant Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil & Gas Well Accidents	0.1	0.1	0.2	0.3	0.5	0.1	0.2	1.3
Pipeline Accidents	0.1	0.1	0.2	0.3	0.5	0.1	0.2	1.3
Public Health Emergencies	0.2	0.3	0.5	0.8	0.8	0.2	0.2	2.7
Terrorism/Sabotage /WMD	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Subsidence	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hail	0.1	0.1	0.2	0.0	0.3	0.1	0.2	0.8
Lightning	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Severe Winds	0.2	0.3	0.5	0.3	0.3	0.1	0.2	1.6
Tornadoes	0.1	0.2	0.2	0.5	0.3	0.1	0.2	1.4
Transportation Accidents	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Ice & Sleet Storms	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Snow Storms	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0

St. Clair Shores

HAZARD TYPE	HAZARD ASPECTS							Overall Hazard Rating
	Probability of occurrence	Population affected	Area affected	Potential for casualties	Potential for property damage	Potential for economic disruption	Corollary effects (utilities & community services)	
	5%	10%	15%	25%	25%	5%	15%	100%
Civil Disturbances	0.1	0.3	0.5	0.8	0.8	0.1	0.3	2.7
Drought	0.1	0.3	0.5	0.8	0.8	0.2	0.5	2.9
Earthquakes	0.1	0.3	0.5	0.5	0.5	0.1	0.3	2.2
Energy Emergencies	0.2	0.3	0.5	0.5	0.5	0.1	0.5	2.5
Extreme Temperatures	0.2	0.4	0.6	0.8	0.8	0.2	0.6	3.4
Scrap Tire Fires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Structural Fires	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Wildfires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dam Failures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Riverine Flooding	0.2	0.5	0.8	0.8	1.3	0.2	0.6	4.2
Shoreline Flooding	0.2	0.5	0.8	0.8	1.3	0.2	0.6	4.2
Fixed Site Hazmat Incident	0.2	0.4	0.6	0.8	0.8	0.2	0.5	3.3
Transportation Hazmat Incident	0.2	0.4	0.6	0.8	0.8	0.2	0.5	3.3
Infrastructure Failures	0.2	0.4	0.6	0.8	1.0	0.2	0.3	3.4
Nuclear Attack	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear Power Plant Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil & Gas Well Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pipeline Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Public Health Emergencies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Terrorism/Sabotage /WMD	0.1	0.2	0.3	0.5	0.5	0.1	0.3	2.0
Subsidence	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Hail	0.1	0.3	0.5	0.3	0.8	0.1	0.6	2.5
Lightning	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Severe Winds	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Tornadoes	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Transportation Accidents	0.2	0.2	0.3	0.8	0.5	0.1	0.2	2.1
Ice & Sleet Storms	0.2	0.3	0.5	0.8	0.8	0.3	0.8	3.4
Snow Storms	0.2	0.5	0.8	0.8	0.8	0.3	0.6	3.8

Sterling Heights

HAZARD TYPE	HAZARD ASPECTS							Overall Hazard Rating
	Probability of occurrence	Population affected	Area affected	Potential for casualties	Potential for property damage	Potential for economic disruption	Corollary effects (utilities & community services)	
	5%	10%	15%	25%	25%	5%	15%	
Civil Disturbances	0.2	0.4	0.5	1.0	1.0	0.2	0.5	3.7
Drought	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Earthquakes	0.1	0.1	0.3	0.3	0.3	0.0	0.2	1.1
Energy Emergencies	0.3	0.5	0.8	1.0	1.0	0.3	0.8	4.5
Extreme Temperatures	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Scrap Tire Fires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Structural Fires	0.1	0.2	0.3	0.5	0.5	0.1	0.3	2.0
Wildfires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dam Failures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Riverine Flooding	0.2	0.2	0.3	0.3	0.3	0.1	0.2	1.4
Shoreline Flooding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed Site Hazmat Incident	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Transportation Hazmat Incident	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Infrastructure Failures	0.2	0.4	0.6	0.5	0.5	0.2	0.8	3.1
Nuclear Attack	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Nuclear Power Plant Accidents	0.2	0.3	0.5	0.5	0.5	0.3	0.8	3.0
Oil & Gas Well Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pipeline Accidents	0.2	0.3	0.3	1.0	0.3	0.2	0.8	2.9
Public Health Emergencies	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Terrorism/Sabotage /WMD	0.2	0.5	0.3	0.5	0.3	0.3	0.8	2.8
Subsidence	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hail	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Lightning	0.3	0.5	0.8	1.3	1.3	0.3	0.8	5.0
Severe Winds	0.2	0.4	0.6	1.0	1.0	0.2	0.6	4.0
Tornadoes	0.2	0.3	0.5	0.8	0.8	0.2	0.5	3.0
Transportation Accidents	0.1	0.2	0.3	0.8	0.5	0.2	0.2	2.2
Ice & Sleet Storms	0.2	0.3	0.5	0.8	1.3	0.2	0.5	3.6
Snow Storms	0.3	0.5	0.8	0.5	0.5	0.2	0.3	3.0

City of Utica

HAZARD TYPE	HAZARD ASPECTS							Overall Hazard Rating
	Probability of occurrence	Population affected	Area affected	Potential for casualties	Potential for property damage	Potential for economic disruption	Corollary effects (utilities & community services)	
	5%	10%	15%	25%	25%	5%	15%	
Civil Disturbances	0.1	0.2	0.3	0.3	0.8	0.1	0.3	2.0
Drought	0.2	0.3	0.5	0.5	0.5	0.1	0.5	2.4
Earthquakes	0.1	0.1	0.2	0.5	0.5	0.1	0.5	1.8
Energy Emergencies	0.2	0.5	0.8	0.8	1.0	0.3	0.6	4.0
Extreme Temperatures	0.2	0.4	0.8	0.3	0.5	0.1	0.6	2.8
Scrap Tire Fires	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2
Structural Fires	0.2	0.2	0.3	1.0	1.3	0.2	0.5	3.6
Wildfires	0.1	0.2	0.2	0.5	0.5	0.0	0.0	1.4
Dam Failures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Riverine Flooding	0.3	0.5	0.6	1.0	1.3	0.2	0.5	4.2
Shoreline Flooding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed Site Hazmat Incident	0.1	0.3	0.3	1.0	0.5	0.1	0.5	2.8
Transportation Hazmat Incident	0.3	0.4	0.6	0.8	0.8	0.2	0.3	3.3
Infrastructure Failures	0.2	0.5	0.8	0.5	0.5	0.2	0.6	3.2
Nuclear Attack	0.1	0.5	0.8	1.3	1.3	0.3	0.8	4.8
Nuclear Power Plant Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil & Gas Well Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pipeline Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Public Health Emergencies	0.2	0.5	0.8	1.0	0.5	0.2	0.5	3.6
Terrorism/Sabotage /WMD	0.2	0.5	0.8	1.0	0.8	0.2	0.8	4.1
Subsidence	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hail	0.2	0.4	0.8	0.3	1.0	0.1	0.3	3.0
Lightning	0.2	0.4	0.6	0.3	1.0	0.1	0.3	2.9
Severe Winds	0.2	0.4	0.6	0.5	1.0	0.2	0.5	3.3
Tornadoes	0.2	0.4	0.6	0.8	1.3	0.3	0.6	4.1
Transportation Accidents	0.2	0.2	0.3	0.8	0.8	0.1	0.3	2.6
Ice & Sleet Storms	0.3	0.5	0.8	1.0	1.3	0.3	0.6	4.6
Snow Storms	0.3	0.5	0.8	1.0	1.3	0.3	0.6	4.6

Warren

HAZARD TYPE	HAZARD ASPECTS							Overall Hazard Rating
	Probability of occurrence	Population affected	Area affected	Potential for casualties	Potential for property damage	Potential for economic disruption	Corollary effects (utilities & community services)	
	5%	10%	15%	25%	25%	5%	15%	
Civil Disturbances	0.1	0.1	0.2	0.3	0.3	0.1	0.3	1.2
Drought	0.1	0.1	0.3	0.3	0.3	0.1	0.2	1.2
Earthquakes	0.1	0.4	0.6	0.5	0.8	0.2	0.5	2.9
Energy Emergencies	0.2	0.5	0.8	0.3	0.3	0.2	0.8	2.9
Extreme Temperatures	0.1	0.1	0.2	0.5	0.3	0.1	0.2	1.3
Scrap Tire Fires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Structural Fires	0.3	0.3	0.5	0.5	1.3	0.2	0.3	3.2
Wildfires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dam Failures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Riverine Flooding	0.1	0.2	0.3	0.3	0.8	0.2	0.5	2.2
Shoreline Flooding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed Site Hazmat Incident	0.2	0.2	0.3	0.5	0.5	0.1	0.3	2.1
Transportation Hazmat Incident	0.2	0.3	0.5	0.5	0.5	0.1	0.3	2.4
Infrastructure Failures	0.2	0.5	0.8	0.3	0.3	0.2	0.6	2.7
Nuclear Attack	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear Power Plant Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil & Gas Well Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pipeline Accidents	0.1	0.2	0.5	0.5	0.8	0.1	0.5	2.5
Public Health Emergencies	0.1	0.3	0.5	1.0	0.3	0.2	0.5	2.7
Terrorism/Sabotage /WMD	0.1	0.2	0.2	0.5	0.3	0.2	0.6	2.0
Subsidence	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Hail	0.3	0.5	0.8	0.0	1.0	0.1	0.2	2.8
Lightning	0.3	0.5	0.8	0.3	0.8	0.1	0.2	2.8
Severe Winds	0.3	0.5	0.8	0.3	1.0	0.2	0.8	3.7
Tornadoes	0.3	0.5	0.8	0.8	1.3	0.2	0.8	4.5
Transportation Accidents	0.2	0.1	0.2	0.5	0.5	0.1	0.5	2.0
Ice & Sleet Storms	0.3	0.5	0.8	0.3	0.8	0.2	0.5	3.1
Snow Storms	0.3	0.5	0.8	0.3	0.5	0.2	0.6	3.0

Washington

HAZARD TYPE	HAZARD ASPECTS							Overall Hazard Rating
	Probability of occurrence	Population affected	Area affected	Potential for casualties	Potential for property damage	Potential for economic disruption	Corollary effects (utilities & community services)	
	5%	10%	15%	25%	25%	5%	15%	
Civil Disturbances	0.1	0.1	0.0	0.3	0.0	0.1	0.2	0.6
Drought	0.1	0.1	0.0	0.3	0.3	0.1	0.2	0.9
Earthquakes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Energy Emergencies	0.1	0.1	0.0	0.3	0.3	0.1	0.2	0.9
Extreme Temperatures	0.1	0.1	0.0	0.3	0.0	0.1	0.2	0.6
Scrap Tire Fires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Structural Fires	0.2	0.3	0.0	0.8	0.8	0.1	0.3	2.4
Wildfires	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dam Failures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Riverine Flooding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Shoreline Flooding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed Site Hazmat Incident	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Transportation Hazmat Incident	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Infrastructure Failures	0.1	0.2	0.0	0.5	0.5	0.1	0.3	1.7
Nuclear Attack	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear Power Plant Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil & Gas Well Accidents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pipeline Accidents	0.1	0.2	0.2	0.0	0.3	0.0	0.2	0.8
Public Health Emergencies	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Terrorism/Sabotage /WMD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subsidence	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hail	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Lightning	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Severe Winds	0.1	0.2	0.3	0.5	0.5	0.1	0.3	2.0
Tornadoes	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Transportation Accidents	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Ice & Sleet Storms	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0
Snow Storms	0.1	0.1	0.2	0.3	0.3	0.1	0.2	1.0